# Strengthening Unmarried Families: Could Enhancing Couple Relationships Also Improve Parenting?

Marcia J. Carlson *Columbia University* 

Sara S. McLanahan *Princeton University* 

Policy makers propose to promote healthy marriage among low-income unmarried couples by providing services to improve relationship skills. This article uses data from the Fragile Families and Child Wellbeing Study to explore whether enhancing parents' relationship skills may have spillover effects on parent-child relationships. Drawing on findings that relationship quality is positively associated with parenting among married couples, the study examines whether a similar link holds for unmarried couples. A positive association is observed between parents' relationship quality at the time of a baby's birth and parenting about 1 year later for both mothers and fathers. Findings indicate that the association between relationship quality and parenting is not affected by marital status. Further, among unmarried couples, neither coresidence nor birth order affects the association.

The confluence of trends in marriage and fertility in recent decades has led to a rise in nonmarital childbearing. Today, 36 percent of all children are born to unmarried couples, while the percentages are even higher among African American and Hispanic couples: 46 percent and 69 percent, respectively (Hamilton et al. 2005). In response to the high rates of nonmarital childbearing and concern about children's well-being, the recent reauthorization of the Temporary Assistance for Needy Families program included annual federal expenditures of \$150 million for programs to promote healthy marriage among

unwed parents through the Healthy Marriage Initiative (U.S. Department of Health and Human Services 2006). The primary focus of these programs is to enhance couples' relationship skills and increase union stability (Dion et al. 2003). Research now shows that well-designed premarital and postmarital intervention programs strengthen couple relationships, enhance marital stability, and reduce divorce (Stanley et al. 1995; Stanley, Blumberg, and Markman 1999; Stanley 2001). Policy makers hope such programs will do the same for unmarried parents. Research using multiple data sources shows that, contrary to conventional wisdom, unmarried parents highly value marriage and desire marriage for themselves (Lichter, Batson, and Brown 2004; Gibson-Davis, Edin, and McLanahan 2005; Waller and McLanahan 2005). Relationship education may therefore help unmarried couples realize their own intentions.

Relationship education programs may also indirectly increase the quality of parenting. An extensive literature shows that marital quality and relationship quality are linked to positive parenting and outcomes for children (Howes and Markman 1989; Cummings and Davies 1994; Erel and Burman 1995; Aldous, Mulligan, and Bjarnason 1998; Emery 1999; Lindahl and Malik 1999; White 1999; Kitzmann 2000; Krishnakumar and Buehler 2000; Orbuch, Thornton, and Cancio 2000). Most of these studies, however, use small samples of married couples that are disproportionately white and middle income (Erel and Burman 1995; Karney and Bradbury 1995). Thus, the link between relationship quality and parenting remains largely unexamined for unmarried, minority, and low-income parents.

This article examines the association between relationship quality and parenting by using data from a new longitudinal survey of both married and unmarried couples that gave birth in large U.S. cities between 1998 and 2000. Both biological parents were interviewed shortly after the birth of their child and again when the child was approximately 1 year old, enabling the research to consider the association between relationship quality and parenting during early childhood. The study focuses on couples that were romantically involved at the time of their baby's birth and in the subsequent year; this includes couples that were married, cohabiting, and visiting (romantically involved but living apart). Two measures of relationship quality and two measures of parenting are used. The study investigates whether there are differences by marital status in how relationship quality is linked to parenting. Among unmarried parents, it considers whether relationship status (cohabiting or visiting) and birth order (first or subsequent birth) affect the association between relationship quality and early parenting.

# Theoretical Perspectives and Previous Research

# Relationship Quality and Parenting

Family theory rests on the notion that the family is a social system in which dyadic relationships (mothers and fathers, parents and children, siblings) between family members affect both individuals and other family relationships (Belsky 1984; Bronfenbrenner 1986; Erel and Burman 1995; Cox and Paley 1997). The marital relationship is of particular importance and has been viewed historically as central to nuclear family dynamics (Cummings and O'Reilly 1997). Married couples with positive relationships (i.e., relationships with high mutual support and empathy and with low conflict) are more satisfied with their relationships and more likely to stay together than couples with poor relationships (Cowan et al. 1994; Gottman 1994). According to the "spillover hypothesis" (Erel and Burman 1995, 109), there is emotional spillover of positive affect or stress and overload from one dyadic family relationship to another. The empirical research indeed provides strong evidence for a positive association between the quality of marital and parent-child relationships (Cox et al. 1989; Erel and Burman 1995; Aldous et al. 1998; Lindahl and Malik 1999; White 1999; Kitzmann 2000; Krishnakumar and Buehler 2000; Orbuch et al. 2000). Most studies of marital quality and parenting focus on negative marital functioning (conflict, hostility, or aggression) rather than on positive marital quality (but see White 1999 for an exception).

Parenting (or parents' role in the parent-child relationship) can be broadly categorized into positive behaviors (i.e., warmth, engagement, and responsiveness) and negative behaviors (i.e., punitiveness, harshness, and hostility). It is widely agreed that positive parenting is beneficial, and negative parenting is detrimental, for children's healthy development (Collins et al. 2000; Tamis-LeMonda, Bornstein, and Baumwell 2001; Boyle et al. 2004). Although there are some known gender differences in parenting a new baby (with women being more psychologically and physically involved in the child's daily care [Cowan et al. 1985; Nomaguchi and Milkie 2003]), parental behavior by both mothers and fathers is shown to affect young children's development (Kochanska, Aksan, and Carlson 2005).

### What about Unmarried Parents?

Although the vast majority of research on the correlates and consequences of partner relationship quality focuses on marital relationships, some studies in nonmarital contexts show that the quality of the relationship between the parents has important consequences. Most such studies focus on noncustodial fathers after divorce or on nonresident

fathers generally (both never-married and divorced fathers). The studies show that the quality of the relationship between parents after divorce is a key predictor of whether noncustodial fathers visit (Thompson and Laible 1999) and financially support (Teachman 1991) their children. Yet only a handful of known studies explore the link between relationship quality and fathering among unmarried parents as a group. This lack of research is likely due to the fact that data are limited on relationship quality among unmarried parents. Using a sample of unmarried, urban, African American fathers, Rebekah Coley and P. Lindsay Chase-Lansdale (1999) find that a close mother-father relationship encourages paternal involvement with young children. Marcia Carlson and Sara McLanahan (2004) find a positive association between emotional supportiveness in the mother-father relationship and fathers' involvement around the time of a nonmarital birth.

Since spillover may occur across varying family relationships, there is likely a positive association between the quality of a couple's relationship and the quality of parenting among unmarried parents, as there is among married parents. At the same time, since marriage represents a significant commitment between partners, a commitment that has both legal and social ramifications, there may be differences by marital status in how relationship quality and parenting are linked. However, the direction of the differences is not clear. On the one hand, the association between relationship quality and parenting might be stronger among unmarried couples, as parental roles in nonmarital relationships are less scripted by social norms than those roles in marital settings. Thus, the nature of the parent-child relationship may be more contingent on relationship quality. On the other hand, the association between relationship quality and parenting may be stronger among married couples because they invest more in the relationship (as evidenced by their legal commitment) than their unmarried counterparts do; their roles as partners and parents may be perceived as a larger part of their identity and may be more tightly linked. While a priori expectations are uncertain, this article tests whether and how marriage may moderate the association between relationship quality and parenting.

Does coresidence matter?—Among unmarried couples that are romantically involved at the time of their baby's birth, the link between relationship quality and parenting may vary between couples living together and those living apart (in so-called visiting relationships). Recent research shows that unmarried visiting and cohabiting couples differ in various demographic characteristics and that visiting couples typically have lower-quality relationships than cohabiting couples (Osborne 2005). Coresidence allows both parents to interact regularly with the child, while a nonresident parent faces greater barriers to frequent interaction. Therefore, the quality of the relationship between parents

when one is nonresident may be more influential for parenting than the quality of the relationship between coresiding parents.

Are first births different?—Research suggests that the time shortly after a baby's birth is a critical period in which the quality of the marital relationship has particularly strong influence on the development of parent-child relationships (Cox et al. 1989). The birth of a child is a major life event, bringing with it a new parental identity and new responsibilities. Relationship quality typically declines after a baby's birth (Cowan and Cowan 1992; Shapiro, Gottman, and Carrère 2000), though the extent of change varies (Belsky and Rovine 1990). Higher-order births create new demands on parents' time and economic resources. Such demands, in turn, affect the parental relationship. However, the first birth represents the most important transition, as each parent individually and the couple together assume new parental roles (Cowan and Cowan 1992).

Using a large multiethnic sample of married and unmarried couples, this article examines four research questions. The first is whether parents' relationship quality (both positive and negative measures) is positively related to parenting behavior (both positive and negative measures). The second is whether there are differences between married and unmarried parents in how relationship quality is linked to parenting. The third and fourth are if, among unmarried parents, coresidence and first-birth status, respectively, affect how relationship quality is associated with parenting.

## Other Variables

Previous research points to a number of variables that are related to parents' relationship quality and parenting. These are discussed only briefly here, as they are not the major focus. They are mostly used as background variables that help to properly specify the models, eliminating potentially spurious relationships. Parents' older age is associated with a greater postbirth decline in marital satisfaction (Cowan and Cowan 1992), lower-quality marital interactions (Frosch, Mangelsdorf, and McHale 1998), and more effective parenting (Day, Peterson, and McCracken 1998). Race and ethnicity may be associated with parenting practices (Berlin et al. 1995; Brooks-Gunn, Klebanov, and Duncan 1996). Growing up with both parents until adulthood likely affects both relationship quality and parenting, since parenting practices affect children both directly (modeling) and indirectly (emotional well-being and beliefs; Gable, Belsky, and Crnic 1995). As noted above, the first birth is more significant than later births for shifting individual parental identities and responsibilities, as well as for affecting dyadic couple interaction (Cowan and Cowan 1992). Because highly educated parents are more likely than less educated parents to prepare for parenthood by reading books or taking courses, they may develop stronger parenting skills than less educated parents (Simons et al. 1990). Mothers' employment may increase stress and decrease the time and energy they have to invest in both their partners and parental roles (Belsky 1984). Poverty is also shown to adversely affect parenting behavior (McLoyd 1990).

Parents in better physical health, and those who are free from substance abuse problems, may have greater energy and capacity for positive relationships as partners and parents. Having more than one child in the household may diminish that energy. Religiosity is positively related to paternal involvement (King 2003) and to expressive mothering as well (Wilcox 1998). Whether the mother receives prenatal care in the first trimester of pregnancy is a crude indicator of early parenting behavior, since prenatal care is nearly universally available (through the Medicaid program) to those who seek it; controlling for receipt of prenatal care provides a more conservative estimate of how the quality of the relationship between parents at birth affects subsequent parenting. It is well known that child temperament affects family process (Lerner 1982), and destructive parenting behaviors may increase with children's difficult temperament (Simons et al. 1990). Finally, the literature on coparenting (i.e., parents working together to raise their child) underscores that one parent's practices and behaviors are not independent of those of the other parent (Gable, Crnic, and Belsky 1994).

## Data and Methods

This study uses data from the Fragile Families and Child Wellbeing Study, a new birth-cohort study of approximately 4,900 children born between 1998 and 2000 (including 3,712 children born to unmarried parents and 1,186 children born to married parents) in 20 cities with populations over 200,000. The Fragile Families Study used a stratified random sampling design; stratification was based on the public policy environments and local labor market conditions in the cities, and sampling occurred at three stages: cities, hospitals within cities, and births within hospitals (see Reichman et al. [2001] for more information on study design). Baseline interviews with mothers and fathers were conducted shortly after their child's birth. Mothers were interviewed in person in the hospital within 48 hours of the birth; fathers were interviewed either in the hospital or wherever they could be located. Followup interviews with both mother and father occurred when the child was about 1, 3, and 5 years old. Response rates for the baseline survey among eligible parents are 87 percent for unmarried mothers, 82 percent for married mothers, 75 percent for unmarried fathers, and 89 percent for married fathers. The 1-year follow-up interviews were completed with 90 percent of unmarried eligible mothers, 91 percent of married eligible mothers, 70 percent of eligible unmarried fathers, and with 82 percent of eligible married fathers.

The sample includes 2,803 couples that were in a romantic relationship at both surveys (baseline and 1 year) and did not have missing data on the relationship quality and parenting variables. The analyses use parallel samples of mothers and fathers who are the biological parents of the focal child. The Fragile Families data are well suited for the study because they include multiple measures of relationship quality and parenting (positive and negative), because they include interviews with both mothers and fathers, and because they include a large sample of minority and unmarried parents.

#### Variables

The dependent variables are mothers' and fathers' parenting at the 1year follow-up survey (when the child was 15 months old, on average). One positive and one negative measure of parental behavior were examined for each parent: reports of positive engagement and frequency of spanking, respectively. A long-standing tenet of developmental psychology is that parental interaction and engagement has a substantial effect on children's developmental trajectories (Maccoby and Martin 1983). Positive engagement here is measured by mothers' and fathers' reports of the number of days on which they engaged in the following five activities with their child in the week prior to the interview: play games like "peek-a-boo" or "gotcha," play inside with toys, sing songs or nursery rhymes, read stories, and tell stories. Responses range from 0 to 7 days; these are averaged to yield a composite measure of engagement (Cronbach's alpha = .76 for fathers and .69 for mothers).<sup>2</sup> The second measure assesses parenting through reports by mothers and fathers of the frequency with which they spanked the child in the month prior to the interview. A recent meta-analysis finds that corporal punishment (of which spanking is the most common form) is negatively associated with child outcomes (Gershoff 2002). While there is some disagreement about when and to what degree spanking is detrimental (Baumrind, Larzelere, and Cowan 2002), spanking is rarely used with infants (Gershoff 2002); all children of parents in the current study are infants, and thus spanking by parents in this sample could be considered harsh parenting behavior. Parents were asked whether they spanked the child in the month before the interview because she or he was misbehaving or acting up; parents who replied affirmatively were asked whether spanking occurred "every day or nearly every day," "a few times a week," "a few times in this past month," or "only once or twice." Responses are coded into a five-category variable, ranging from 1 (never) to 5 (every day or nearly every day). Mothers' and fathers' reports about their parenting are positively correlated and statistically significant, but the correlations are quite low, possibly indicating that parents behave somewhat independently. Among parents who are married at the time of the focal child's birth, the correlations between mother and father are .24 for engagement and .21 for spanking; among parents who are unmarried, the corresponding figures are .13 for engagement and .25 for spanking.

The key independent variable is parents' relationship quality. Two aspects of relationship quality are measured. First, supportiveness reflects the degree of positive affect in the mother-father relationship at the time of the focal child's birth; supportiveness is represented by the mean score across four items. The items assess how frequently the other parent displays certain behaviors: (1) "is fair and willing to compromise when you have a disagreement," (2) "expresses affection or love for you," (3) "insults or criticizes you or your ideas" (coding reversed), and (4) "encourages or helps you to do things that are important to you." Response choices are (1) never, (2) sometimes, and (3) often; responses are averaged into a composite score, with higher scores indicating greater supportiveness (alpha = .55 for both fathers and mothers). A measure of the change in supportiveness is also included, represented as the difference between an identical supportiveness measure at the baseline and 1-year surveys. A positive change score indicates that the relationship reportedly improved over time, and a negative score suggests that it attenuated.

The second aspect of relationship quality is the frequency of conflict in the couple's relationship. Parents are asked during the baseline interview about the frequency of conflict over six topics: money, spending time together, sex, the pregnancy, drugs, and being faithful. Again, response choices are (1) never, (2) sometimes, and (3) often. Responses are averaged into a composite score, with higher scores indicating more frequent conflict (alpha = .61 for fathers, .62 for mothers).<sup>4</sup> Unfortunately, a comparable measure of conflict is not included in the 1-year survey, so there is no change score on conflict. The correlations for mothers' and fathers' reports of relationship quality are again positive and statistically significant but mostly low; for married parents, the correlations are .24 for supportiveness and .45 for conflict. For unmarried parents, they are .21 for supportiveness and .31 for conflict. The fact that the supportiveness items concern the other parent's behavior could contribute to the low correlation there, whereas the conflict measure reflects each parent's report of the conflict between them; for both measures, the low reliability between mothers' and fathers' reports reflects their different perspectives on the relationship. To reflect the intrinsically dyadic nature of couple relationships, a composite score is used for each relationship measure, taking the average of mothers' and fathers' reports for supportiveness, change in supportiveness, and frequency of conflict, respectively.<sup>5</sup>

All statistical models include the set of demographic and socioeconomic variables that may be related to both relationship quality and parenting. Unless otherwise indicated, identical measures from the baseline survey are used for both mothers and fathers. Mothers' and fathers' ages are specified as continuous variables. Each parent's race and ethnicity are specified with a series of dummy variables: non-Hispanic black (reference category), non-Hispanic white, Hispanic, and other non-Hispanic race. A separate dummy variable indicates when the parents are of different races or ethnicities. Family background is represented by a dichotomy for whether each parent lived with both of his or her parents at age 15. A dummy variable measures whether the focal child is each parent's first.

Parents' economic capabilities and current circumstances are measured by the level of education, employment status, and household poverty status. Level of education is specified as four dummy variables: less than high school degree (reference category), high school degree, some college, and bachelor's degree or higher. Employment status reflects whether parents worked in the week (for fathers) or year (for mothers) prior to the survey. Household poverty status, or income-to-poverty ratio, is measured by dividing household income by the relevant federal poverty threshold in the baseline survey year (1998 to 2000) for the household in question. Three dummy variables represent being poor (0–.99), near poor (1–2.49), and not poor (2.5 and higher).

Parents' self-reported physical health status is included as a continuous variable; scores range from 1 (poor) to 5 (excellent). Parents' reported problems with substance abuse are represented by a dummy variable; responses are coded as one if parents respond affirmatively that "drinking or drug use interfered with [their] work or personal relationships," and otherwise as zero. Number of children in the household is a continuous variable. The frequency of each parent's religious attendance is a continuous variable, ranging from 1 (not at all) to 5 (once a week or more). A variable indicates that the mother received prenatal care in the first trimester of her pregnancy. A dummy variable represents whether the child is a boy. Whether the child is perceived to have a difficult temperament is represented by the average of three items from the Emotionality, Activity, and Sociability Temperament Survey (Buss and Plomin 1984). At the 1-year survey, mothers report how often the focal child fusses and cries, gets upset easily, and reacts very strongly when upset (Buss and Plomin 1984; Mathiesen and Tambs 1999). Response choices range from 1 (not at all like my child) to 5 (very much like my child). Finally, the other parent's engagement and spanking behaviors, respectively, are included.

Table 1
Sample Description by Marital Status at Baby's Birth (Proportions and Means)

	Mar	RIED	Unmarried		
	Mother	Father	Mother	Father	
Age at baby's birth (mean)	29.60	31.92	23.78	26.23	
Race and ethnicity:					
White non-Hispanic	47.4	47.3	18.1	15.5	
Black non-Hispanic	24.0	26.0	47.8	49.9	
Hispanic	20.8	20.2	31.7	32.2	
Other non-Hispanic	7.8	6.6	2.4	2.4	
Parents are of different race and ethnicity	11.4	11.4	12.5	12.5	
Parent lived with both parents at age 15	65.2	67.6	39.1	41.6	
Focal child is first birth	35.2	34.3	38.8	45.5	
Level of education:					
Less than high school degree	11.3	12.0	36.8	38.6	
High school degree	19.3	22.7	35.1	36.3	
Some college	29.8	30.2	24.9	21.8	
Bachelor's degree or higher	39.6	35.1	3.3	3.3	
Worked in the last year or week prior to survey <sup>a</sup>	78.9	92.5	81.8	79.6	
Household income-to-poverty ratio:					
Poor (099)	8.6	8.3	37.4	30.9	
Near poor (1–2.49)	24.0	22.8	38.7	38.5	
Not poor $(2.5+)$	67.4	68.9	23.9	30.6	
Health status (mean) <sup>b</sup>	4.09	4.07	3.87	3.95	
Substance abuse problem	1.0	2.3	2.6	6.1	
Number of children in household (mean)	1.07	1.03	1.26	1.01	
Religious attendance (mean) <sup>c</sup>	3.54	3.36	2.90	2.63	
Mother received prenatal care in first trimester	91.9	NA	81.3	NA	
Child is a boy	54.0	54.0	52.2	52.2	
Child has difficult temperament (mean) <sup>d</sup>	2.59	2.59	2.83	2.83	
Number of cases $(N)$	732	732	1,351	1,351	

Note.—All variables are from the baseline survey (just after baby's birth) and self-reported unless otherwise noted. NA = not applicable.

<sup>b</sup> Reports of health status range from 1 (poor) to 5 (excellent).

# Sample

Table 1 provides descriptive information on the demographic, psychosocial, and economic characteristics of the mothers and fathers in the sample by marital status at the focal child's birth. There are a number of differences between married and unmarried parents (all differences noted below are statistically significantly different at p < .05). Married parents are, on average, about 5 to 6 years older than unmarried parents, less likely to be non-Hispanic black, and more likely to have lived with both parents at age 15. They also have much higher educational attainment. Only 11–12 percent of married mothers and fathers have less than a high school degree, compared to nearly two-fifths of unmarried

<sup>&</sup>lt;sup>a</sup> Mothers (just after the time of birth) were asked whether they worked in the previous year; fathers were asked about whether they worked in the previous week.

<sup>&</sup>lt;sup>c</sup> Reports of religious attendance range from 1 (never) to 5 (once a week or more).

<sup>&</sup>lt;sup>d</sup> From the 1-year survey, reported by mothers. Scores range from 1 to 5; a higher score indicates greater difficulty.

parents. Married parents are much more likely than unmarried parents to have graduated from college (more than one-third, compared to 3 percent of unmarried parents). Around 80 percent of both married and unmarried mothers reportedly worked in the year prior to the survey; 93 percent of married fathers and 80 percent of unmarried fathers worked in the previous week. Only 8–9 percent of married parents live in poverty, compared to 31-37 percent of unmarried parents. Parents generally report that they are in good health, with mean scores around 4.0 on a five-point scale. Admitted problems with substance abuse are rare; between 1 and 6 percent reported such problems. The mean number of children in the household is just over one, although the mean is a little higher for unmarried mothers. Married parents reportedly attend religious services more frequently than unmarried parents. Ninety-two percent of married mothers say they received prenatal care in the first trimester of their pregnancy, compared to 81 percent of unmarried mothers. Just over half of all children are boys. Children of unmarried parents score somewhat higher on the measure that assesses whether a child has a difficult temperament.

#### Results

Table 2 presents descriptive statistics (means and standard deviations) on the relationship quality and parenting measures reported by married, cohabiting, and visiting parents at the time of the baby's birth. Differences across these three groups are tested. There is no statistically significant difference in supportiveness at the time of birth between married and cohabiting parents, but both groups report statistically significantly higher supportiveness than do visiting couples. With respect to conflict, married couples report statistically significantly less frequent conflict than do cohabiting couples, who in turn report statistically significantly less frequent conflict than visitors. At the same time, the substantive differences by relationship status are in most cases quite small.

All types of couples report that the level of supportiveness in the relationship declines in the year following their baby's birth. Cohabitors experience a greater decline than visitors (with no statistically significant difference in the decline when comparing married couples to the other two groups). The pattern of relationship change appears to be similar across couples: Just over half report that supportiveness goes down between the baseline and 1-year surveys (53 percent of married couples, 55 percent of cohabitors, and 52 percent of visitors); roughly one-fourth report that supportiveness stays the same (27 percent of married couples, 23 percent of cohabitors, and 17 percent of visitors). Another quarter indicate that supportiveness goes up (20 percent of married couples, 22 percent of cohabitors, and 31 percent of visitors) over the time period (figures not shown in table).

 ${\bf Table~2}$  Means on Relationship Quality and Parenting Measures by Marital Status

	Married (M)		Total		Cohabiting (C)		Visiting (V)		SIGNIFICANT
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	DIFFERENCES <sup>a</sup>
Parents' relationship quality (mother-father average):									
Supportiveness at time of birth	2.74	.24	2.70	.25	2.72	.24	2.67	.27	M, C > V
Change in supportiveness, birth to									,
1 year	10	.24	11	.29	12	.29	08	.30	C > V
Frequency of conflict at time of birth	1.32	.26	1.41	.29	1.40	.29	1.44	.29	M < C < V
Parenting at 1 year:									
Mother's parenting:									
Engagement	5.42	1.35	5.12	1.36	5.11	1.35	5.15	1.40	M > C, V
Frequency of spanking	1.32	.77	1.46	.89	1.43	.87	1.52	.94	M < C, V
Father's parenting:									
Engagement	4.78	1.60	4.48	1.69	4.56	1.66	4.28	1.77	M > C > V
Frequency of spanking	1.29	.74	1.36	.83	1.34	.79	1.44	.91	M < V
Number of parents (N)	73	32	1,3	51	96	51	39	00	

<sup>&</sup>lt;sup>a</sup> Significant differences are tested with Bonferroni multiple-comparison tests (p<.05; Shaffer 1995).

Linear regression models are estimated to predict the two parenting measures (positive engagement and frequency of spanking) for mothers and fathers. We examine mothers and fathers separately in order to understand whether there are different dynamics in how relationship quality affects their parenting. Models for mothers and fathers are jointly estimated for each outcome using seemingly unrelated regressions (Zellner 1962), which allow the error terms to be correlated across mothers' and fathers' equations. To deal with missing data on six control variables with more than 10 missing observations, we assign the missing cases to the overall mean and include a flag variable to indicate the case has missing data on a particular variable. This approach allows us to utilize the full sample, but only cases with valid information affect the regression estimates on particular variables.

Table 3 reports results related to the first hypothesis, that parental relationship quality shows a positive and statistically significant association with parenting for both positive and negative measures. For both mothers and fathers, the level of supportiveness in the parents' relationship at the child's birth is positively and statistically significantly associated with parent-child engagement. The change in supportiveness is also positively related to higher engagement. Together, these findings provide evidence that a supportive mother-father relationship is important for positive parenting of very young children. Also, the change in supportiveness is negatively linked to spanking by mothers (but not fathers), indicating that when the relationship improves between parents, the frequency with which mothers spank their child diminishes.<sup>6</sup> With respect to conflict, parental conflict around the time of the baby's birth is associated with lower paternal engagement. There is a marginally significant positive effect of conflict on maternal engagement, and it is evident from the estimates using mothers' and fathers' individual reports that this is driven entirely by fathers' reports of conflict. Some literature suggests that the gender differentiation in roles subsequent to a new baby's birth may yield conflict and disequilibrium in the couple relationship, with particularly negative consequences for men, given the mother-centered nature of child rearing (Chodorow 1978). This conflict could push mothers to compensate for the negative dynamics in the couple relationship by investing more heavily in the parent-child relationship.

There thus is evidence that both the positive and negative dimensions of parental relationship quality are important for parenting. Supportiveness in the couple relationship at the time of birth and the change in supportiveness over the subsequent year are both significantly statistically associated with positive engagement by both mothers and fathers with their 1-year-old children. Yet, consistent with prior research (e.g., Erel and Burman 1995), there is also some evidence that the frequency of conflict affects parenting.

 $\begin{tabular}{ll} \textbf{Table 3} \\ \hline \textbf{Seemingly Unrelated Regressions of Parenting about 1 Year after Birth$^a$} \\ \hline \end{tabular}$ 

	MOTHER'S PARENTING				FATHER'S PARENTING			
	Engagement		Spanking		Engagement		Spanking	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Parents' relationship quality (mother-father average):								
Supportiveness	.51**	.14	05	.09	.71**	.18	08	.08
Change in supportiveness	.26*	.11	21**	.07	.52**	.14	.01	.07
Conflict	$.20^{+}$	.12	.11	.07	30*	.15	.09	.07
Other characteristics:								
Age at baby's birth	$01^{+}$	.01	$01^{+}$	.00	.01	.01	01**	.00
Race and ethnicity (ref. = black non-Hispanic):								
White non-Hispanic	.25**	.08	18**	.05	.16	.10	10*	.05
Hispanic	07	.08	19**	.05	10	.09	21**	.04
Other non-Hispanic	.14	.15	$18^{+}$	.09	06	.19	.04	.09
Parents are of different race and ethnicity	.20*	.09	04	.06	.23*	.11	03	.05
Parent lived with both parents at age 15	04	.06	04	.04	06	.08	.03	.04
Focal child is first birth	.06	.07	.09*	.04	.22**	.08	.02	.04
Level of education (ref. = less than high school):								
High school degree	.06	.08	.02	.05	.20*	.09	.02	.04
Some college	.24**	.09	02	.05	.32**	.11	$.08^{+}$	.05
Bachelor's degree or higher	.42**	.12	.00	.08	.23	.14	00	.07
Worked in the last year or week prior to survey <sup>b</sup>	06	.08	00	.05	.03	.10	.04	.05
Household income-to-poverty ratio:								
Near poor (1–2.49)	05	.08	.00	.05	19*	.10	.00	.05
Not poor $(2.5^+)$	06	.09	01	.06	23*	.11	.01	.05
Health status <sup>c</sup>	.15**	.03	01	.02	.04	.04	02	.02

Substance abuse problem	22	.20	.27*	.12	.04	.17	$.14^{+}$	.08
Number of children in household	03	.03	04*	.02	01	.03	.02	.02
Religious attendance <sup>d</sup>	.07**	.02	.01	.01	.08**	.03	01	.01
Parents married at baby's birth	03	.08	.03	.05	.01	.09	.02	.04
Mother received prenatal care in first trimester	.18*	.08	01	.05	NA	NA	NA	NA
Child is a boy	08	.06	.09**	.04	.04	.07	.04	.03
Child has difficult temperament <sup>e</sup>	10**	.03	.09**	.02	.06	.04	03	.02
Other parent's parenting	.19**	.02	.41**	.02	.29**	.03	.37**	.02
Constant	2.27**	.54	.88**	.34	.63	.67	1.26**	.32
$R^2$		.109		.087		.073		.062
Number of cases (N)	2,083	3	2,083	}	2,083	3	2,083	3

Note.—NA = not applicable.

<sup>a</sup> Models for mothers and fathers are jointly estimated for engagement and spanking, respectively.

<sup>b</sup> Mothers (just after the time of birth) were asked whether they worked in the previous year; fathers were asked about whether they worked in the previous week.

<sup>&</sup>lt;sup>d</sup> Reports of health status range from 1 (poor) to 5 (excellent).
<sup>d</sup> Reports of religious attendance range from 1 (never) to 5 (once a week or more).
<sup>e</sup> From 1-year survey, reported by mothers. Scores range from 1 to 5; a higher score indicates greater difficulty.

<sup>\*</sup> p < .05.
\* p < .01.

With respect to the background and control variables, results suggest that white non-Hispanic mothers are reportedly more engaged with their children than black non-Hispanic mothers, and black non-Hispanic parents spank their children more frequently than parents in all other racial and ethnic groups. Results also suggest that, in couples of mixed race and ethnicity, both mothers and fathers demonstrate higher engagement, compared to parents with the same race and ethnicity. First-time mothers reportedly spank their children more frequently than mothers who have had prior children, and first-time fathers are more engaged than fathers who have other children. Education is positively related to engagement (but not spanking) among both mothers and fathers. There is no statistically significant effect of employment status on parenting, but fathers who are poor are statistically significantly more engaged than their nonpoor counterparts.<sup>7</sup> Good maternal health is positively associated with positive engagement, and maternal (and to a lesser extent paternal) substance problems are associated with more frequent spanking. The frequency of spanking reportedly diminishes, however, as the number of children in the mother's household increases. Religious attendance is positively correlated with parental engagement for both mothers and fathers. Notably, there is no net difference in mothers' or fathers' parenting by marital status, once relationship quality and other variables that likely differentiate married from unmarried couples are controlled. Receipt of prenatal care during the first trimester of pregnancy is positively associated with maternal engagement. Boys are more likely to be spanked by their mothers than girls. The difficulty of the child's temperament is associated with maternal engagement and spanking; higher scores on the difficult temperament scale are associated with less interaction and more frequent spanking by mothers. Child temperament is not related to fathering. As expected, the other parent's parenting is positively correlated with engagement and spanking, respectively, among both mothers and fathers.

Subsequent analyses provide evidence about whether there are differences in how relationship quality is related to parenting between married and unmarried couples. The first section (marital status results) of table 4 shows these results. For neither mothers nor fathers is there any evidence of statistically significant interactions of supportiveness or conflict with marital status. Thus, the association between partner relationship quality and parenting appears to be similar for unmarried couples and married couples across all measures examined here.

The final analyses explore whether associations between relationship quality and parenting differ among unmarried couples, depending on whether the couples cohabited (71 percent) or lived apart (29 percent) at the time of the baby's birth, and depending on whether couples were having their first child or were having a second or later child. With respect to residential status, there is only one marginally statistically

Table 4 SEEMINGLY UNRELATED REGRESSIONS OF PARENTING WITH INTERACTION EFFECTS FOR Marital Status, Coresidence, and First Birth  $^{\rm a}$ 

	Engagemi	ENT	Spanking		
	Coefficient	SE	Coefficient	SE	
By marital status (full sample):					
Mother's parenting:					
Supportiveness	.43*	.18	.02	.11	
Change in supportiveness	.34*	.14	23**	.08	
Conflict	.27*	.14	.09	.09	
Married × supportiveness	.21	.29	17	.18	
Married × change in supportiveness	38	.25	.14	.16	
Married × conflict	29	.25	.11	.16	
Father's parenting:					
Supportiveness	.79**	.22	11	.10	
Change in supportiveness	.53**	.17	.02	.08	
Conflict	44*	.17	.07	.08	
Married × supportiveness	19	.36	.10	.17	
Married × change in supportiveness	.06	.31	03	.15	
Married × conflict	.51	.31	.06	.15	
By cohabiting vs. visiting (unmarried sample only):					
Mother's parenting:					
Supportiveness	.71*	.32	12	.21	
Change in supportiveness	.57*	.27	49**	.17	
Conflict	.58*	.25	07	.16	
Cohabiting × supportiveness	30	.39	.18	.25	
Cohabiting × change in supportiveness	26	.31	$.36^{+}$	.20	
Cohabiting × conflict	45	.30	.20	.19	
Father's parenting:					
Supportiveness	1.20**	.40	02	.19	
Change in supportiveness	.75*	.33	.13	.16	
Conflict	33	.31	05	.15	
Cohabiting × supportiveness	57	.49	11	.23	
Cohabiting × change in supportiveness	26	.39	15	.19	
Cohabiting × conflict	12	.37	.17	.18	
By first birth vs. later birth (unmarried sample only):					
Mother's parenting:					
Supportiveness	.55*	.23	02	.14	
Change in supportiveness	.45**	.17	22*	.11	
Conflict	.22	.17	.06	.11	
First birth × supportiveness	14	.37	.13	.23	
First birth × change in supportiveness	18	.28	01	.18	
First birth × conflict	.14	.29	.04	.19	
Father's parenting:					
Supportiveness	.76*	.30	22	.14	
Change in supportiveness	.61**	.23	02	.11	
Conflict	36	.24	.10	.11	
First birth × supportiveness	.15	.45	.26	.21	
First birth × change in supportiveness	16	.35	.08	.16	
First birth × conflict	14	.35	06	.16	

Note.—Each model includes all other independent variables shown in table 3 (age, race and ethnicity, family background, first birth, education, employment, poverty status, health status, substance problem, children in household, religious attendance, marital status at birth, prenatal care [mother models only], child sex, child temperament, and other parent's en-

gagement or spanking).

a Models for mothers and fathers are jointly estimated for engagement and spanking, re-\* Models for spectively.

\* p < .10.

\* p < .05.

\*\* p < .01.

significant interaction: change (improvement) in supportiveness is associated with a greater decline in the frequency of spanking by mothers who live apart from the baby's father (as compared to cohabiting mothers). With respect to parity, there are no statistically significant interactions. Relationship quality appears to be just as important for parents who have already had a child as it is for parents experiencing their first child's birth.

## Discussion

The analyses provide new evidence about how relationship quality is associated with parenting for couples with young children, and the results have implications for current public policy initiatives. Reported relationship quality is found to be positively correlated with parenting for both mothers and fathers, corroborating a significant volume of previous research about positive spillover in marital relationships (Erel and Burman 1995; Aldous et al. 1998; Lindahl and Malik 1999; White 1999; Kitzmann 2000; Krishnakumar and Buehler 2000; Orbuch et al. 2000). However, this article extends these findings to a large multiethnic sample that includes unmarried parents who have recently had a child together. The findings about the importance of supportiveness for parenting extend the literature on dyadic family relationships. Until now, that research focused primarily on married couples and the negative effects of marital discord. Results suggest that the correlation between relationship quality and parenting exists for both positive and negative dimensions of relationships. Conflict is found to affect parenting, but the stronger evidence concerns supportiveness within the couple relationship. Supportive behaviors by one's partner at the time of a baby's birth, as well as an increase in the level of supportiveness over time, appear to promote mothers' and fathers' positive engagement in activities with their young children. Both also attenuate the frequency with which mothers spank their children.

The results also suggest that the effects of relationship quality on parenting are similar for mothers and fathers, whether the parents are married or not. Although consistency across family types makes sense theoretically, this is the first known study to provide evidence on the matter. At the same time, the descriptive results indicate that the level of relationship quality is slightly higher among married couples than unmarried couples. Thus, marital status does matter with respect to couple relationship quality, but within marital status (i.e., among married or among unmarried couples), the association between relationship quality and parenting appears to be similar. Further, among unmarried couples, cohabiting couples report higher-quality relationships than visiting couples, but there is no significant difference in the association of relationship quality and parenting for these two groups. In addition,

birth order does not affect the association between relationship quality and mothers' or fathers' parenting.

The results indicate that the current initiatives to promote relationship quality and healthy marriage by increasing unmarried parents' relationship skills might yield benefits for parenting behaviors and, hence, for children. If we assume that the associations are causal (a nontrivial assumption), the results suggest that two dimensions of couple relationships are associated with specific parenting practices. Positive support in relationships is associated with good parenting behaviors (e.g., reading to children) by both mothers and fathers, an increase in supportiveness is associated with less frequent harsh behavior by mothers (i.e., spanking), and conflict in a relationship is associated with lower engagement by fathers.

These findings suggest that interventions might usefully focus on both increasing positive and reducing negative interactions within couples. That observation is underscored by longitudinal research of existing premarital education curricula (Stanley 2001). In order to strengthen couple relationships and facilitate marriage, potential interventions could include a range of marriage education programs designed to enhance communication, improve conflict management, and develop problem-solving skills (see Dion [2005] for a summary of current marriage education programs relevant to the Healthy Marriage Initiative). Further, the results provide strong support for the idea that parenting programs would be most effective if they targeted both parents; until recently, most programs designed to improve parenting and child wellbeing have focused primarily on the mother-child dyad. Results also suggest that interventions potentially could be beneficial for all unmarried couples that are in a romantic relationship at the time of the baby's birth (and stay together over the first year), regardless of whether the parents are living together or not. Finally, while it is well known that the first birth represents an especially significant transition for couples, the findings suggest that relationship quality is equally important for the parenting of mothers and fathers who have already had a child. Hence, results provide little reason to limit eligibility for relationship skills intervention programs to couples having a first birth.

The analyses have several limitations. A major one is that it is not clear that the associations between relationship quality and parenting are causal. One could argue that both variables are due to a third factor, such as commitment to family, which is not measured. Similarly, it could be that the measures of mother-father and parent-child relationship quality simply reflect two dimensions of the same intrinsic attribute: the respondent's interest in and ability to maintain healthy and positive family relationships. As such, findings would not represent causal effects but merely two correlated measures of the same latent construct. Alternatively, one could argue that causality is running in the opposite

direction, from parenting behavior to quality mother-father relationships. Without experimental data, these alternative explanations cannot be ruled out. However, controlling for child's temperament diminishes the likelihood that the results are attributable only to the fact that rearing challenging children negatively affects both parent-child and mother-father relationships. Further, since each parent reports on the perceptions of relationship quality as well as on his or her own parenting, it is possible that the same respondent could overreport or underreport positive feelings of all kinds. This is sometimes referred to as "correlated response bias" (Glenn 1990, 827). Using a composite measure of mothers' and fathers' reports of relationship quality helps address this potential concern.

A second limitation concerns the measures of relationship quality. Since these are reported right after the time of a baby's birth, they may be affected positively or negatively by both the joys and stresses that can accompany the event of childbirth. Thus, the reliability and validity of the baseline measures could be questioned. Including a measure of the change in supportiveness between the time of birth and 1 year later provides a more accurate portrait of the developmental trajectory of couples' relationship quality after their baby's birth. To the extent that the baseline report represents an overestimate of actual quality, the change measure reflects both real change (as couples adjust to the challenges of parenting a young child) and a more realistic assessment after the warm feelings surrounding the time of birth have diminished.

A third limitation concerns the parenting measures. While self-reports of parenting behavior are inferior to more objective direct observations, use of a large-scale survey provides information about a much broader and more representative group of (both married and unmarried) parents than would be possible using observational methods. Thus, to some extent, the study trades breadth for depth. Also, the Fragile Families Study includes unique information about both mothers and fathers, whereas previous studies typically rely on maternal reports about fathering. The 3- and 5-year waves of the Fragile Families Study included observational data on a subset of children. These data were collected by interviewers who directly observe mothers' parenting in the child's home and can provide a better idea of the validity of the self-reported measures.

A final issue is that the sample is limited to couples that are romantically involved both at the time of a baby's birth and 1 year later. The findings, thus, cannot be generalized to couples that do not fit this criterion because they broke up or because one or both parents were not interviewed at the 1-year survey. The authors' analysis suggests that the couples in the Fragile Families Study that break up by the 1-year interview, as well as the couples lost to attrition, typically have lower-

quality relationships (less supportiveness and higher conflict) than couples continuing in the relationship between baseline and the 1-year survey. Excluding these couples, as we do here, may downwardly bias the association between relationship quality and parenting (while upwardly biasing the mean levels of relationship quality) as compared to what would be observed across a sample of all parents after a birth. This potential for bias does not pose a serious problem as long as one is clear about the population to which the findings can be generalized: couples that continued in a romantic relationship at least 1 year after a nonmarital birth; such couples are likely the most viable target for an intervention program.

#### Conclusion

This research provides new evidence about how couple relationship quality is associated with parenting among a diverse sample of married and unmarried couples. Corroborating a vast literature on marital quality, results suggest that the association between partner relationship quality and parenting is similar for unmarried parents and married parents. To the extent that the association is causal, this research suggests that intervention programs designed to strengthen unmarried couple relationships and to encourage marriage could potentially further strengthen families by enhancing the parenting that children receive.

# References

- Aldous, Joan, Gail M. Mulligan, and Thoroddur Bjarnason. 1998. "Fathering over Time: What Makes the Difference?" *Journal of Marriage and the Family* 60 (4): 809–20.
- Baumrind, Diana, Robert E. Larzelere, and Philip A. Cowan. 2002. "Ordinary Physical Punishment: Is It Harmful? Comment on Gershoff (2002)." *Psychological Bulletin* 128 (4): 580–89.
- Belsky, Jay. 1984. "The Determinants of Parenting: A Process Model." *Child Development* 55 (1): 83–96.
- Belsky, Jay, and Michael Rovine. 1990. "Patterns of Marital Change across the Transition to Parenthood: Pregnancy to Three Years Postpartum." *Journal of Marriage and the Family* 52 (1): 5–19.
- Berlin, Lisa J., Jeanne Brooks-Gunn, Donna Spiker, and Martha J. Zaslow. 1995. "Examining Observational Measures of Emotional Support and Cognitive Stimulation in Black and White Mothers of Preschoolers." *Journal of Family Issues* 16 (5): 664–86.
- Boyle, Michael H., Jennifer M. Jenkins, Katholiki Georgiades, John Cairney, Eric Duku, and Yvonne Racine. 2004. "Differential-Maternal Parenting Behavior: Estimating within- and between-Family Effects on Children." Child Development 75 (5): 1457–76.
- Bronfenbrenner, Urie. 1986. "Ecology of the Family as a Context for Human Development: Research Perspectives." *Developmental Psychology* 22 (6): 723–42.
- Brooks-Gunn, Jeanne, Pamela K. Klebanov, and Greg J. Duncan. 1996. "Ethnic Differences in Children's Intelligence Test Scores: Role of Economic Deprivation, Home Environment, and Maternal Characteristics." *Child Development* 67 (2): 396–408.
- Buss, Arnold H., and Robert Plomin. 1984. Temperament: Early Developing Personality Traits. Hillsdale, NJ: Erlbaum.
- Caldwell, Bettye M., and Robert H. Bradley. 1984. Home Observation for Measurement of the

- *Environment.* Little Rock: University of Arkansas at Little Rock, Center for Child Development and Education.
- Carlson, Marcia J., and Sara S. McLanahan. 2004. "Early Father Involvement in Fragile Families." 241–71 in Conceptualizing and Measuring Father Involvement, edited by Randal D. Day and Michael E. Lamb. Mahwah, NJ: Erlbaum.
- Chodorow, Nancy. 1978. The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender. Berkeley: University of California Press.
- Coley, Rebekah Levine, and P. Lindsay Chase-Lansdale. 1999. "Stability and Change in Paternal Involvement among Urban African American Fathers." *Journal of Family Psy*chology 13 (3): 416–35.
- Collins, W. Andrew, Eleanor E. Maccoby, Laurence Steinberg, E. Mavis Hetherington, and Marc H. Bornstein. 2000. "Contemporary Research on Parenting: The Case for Nature and Nurture." American Psychologist 55 (2): 218–32.
- Cowan, Carolyn Pape, and Philip A. Cowan. 1992. When Partners Become Parents: The Big Life Change for Couples. New York: Basic.
- Cowan, Carolyn Pape, Philip A. Cowan, Gertrude Heming, Ellen Garrett, William S. Coysh, Harriet Curtis-Boles, and Abner J. Boles III. 1985. "Transitions to Parenthood: His, Hers, and Theirs." *Journal of Family Issues* 6 (4): 451–81.
- Cowan, Philip A., Carolyn Pape Cowan, Marc S. Schulz, and Gertrude Heming. 1994. "Prebirth to Preschool Family Factors in Children's Adaptation to Kindergarten." 75–114 in *Exploring Family Relationships with Other Social Contexts*, edited by Ross D. Parke and Sheppard G. Kellam. Hillsdale, NJ: Erlbaum.
- Cox, Martha J., Margaret T. Owen, Jerry M. Lewis, and V. Kay Henderson. 1989. "Marriage, Adult Adjustment, and Early Parenting." Child Development 60 (5): 1015–24.
- Cox, Martha J., and Blair Paley. 1997. "Families as Systems." Annual Review of Psychology 48:243–67.
- Cummings, E. Mark, and Patrick Davies. 1994. Children and Marital Conflict: The Impact of Family Dispute and Resolution. New York: Guilford.
- Cummings, E. Mark, and Anne Watson O'Reilly. 1997. "Fathers in Family Context: Effects of Marital Quality on Child Adjustment." 49–65 in *The Role of the Father in Child Development*. Edited by Michael E. Lamb. 3rd ed. New York: Wiley.
- Day, Randal D., Gary W. Peterson, and Coleen McCracken. 1998. "Predicting Spanking of Younger and Older Children by Mothers and Fathers." *Journal of Marriage and the Family* 60 (1): 79–94.
- Dion, M. Robin. 2005. "Healthy Marriage Programs: Learning What Works." Future of Children 15 (2): 139–56.
- Dion, M. Robin, Barbara Devaney, Sheena McConnell, Melissa Ford, Heather Hill, and Pamela Winston. 2003. "Helping Unwed Parents Build Strong and Healthy Marriages: A Conceptual Framework for Interventions." Report no. 8785-401 to the U.S. Department of Health and Human Services. Mathematica Policy Research, Washington, DC.
- Emery, Robert E. 1999. Marriage, Divorce, and Children's Adjustment. 2nd ed. Thousand Oaks, CA: Sage.
- Erel, Osnat, and Bonnie Burman. 1995. "Interrelatedness of Marital Relations and Parent-Child Relations: A Meta-analytic Review." *Psychological Bulletin* 118 (1): 108–32.
- Frosch, Cynthia A., Sarah C. Mangelsdorf, and Jean L. McHale. 1998. "Correlates of Marital Behavior at 6 Months Postpartum." *Developmental Psychology* 34 (6): 1438–49.
- Gable, Sara, Jay Belsky, and Keith Crnic. 1995. "Coparenting during the Child's 2nd Year: A Descriptive Account." *Journal of Marriage and the Family* 57 (3): 609–16.
- Gable, Sara, Keith Crnic, and Jay Belsky. 1994. "Coparenting within the Family System: Influences on Children's Development." *Family Relations* 43 (4): 380–86.
- Gershoff, Elizabeth Thompson. 2002. "Corporal Punishment by Parents and Associated Child Behaviors and Experiences: A Meta-analytic and Theoretical Review." Psychological Bulletin 128 (4): 539–79.
- Gibson-Davis, Christina, Kathryn Edin, and Sara S. McLanahan. 2005. "High Hopes but Even Higher Expectations: The Retreat from Marriage among Low-Income Couples." *Journal of Marriage and Family* 67 (5): 1301–12.
- Glenn, Norval. 1990. "Quantitative Research on Marital Quality in the 1980s: A Critical Review." Journal of Marriage and the Family 52 (4): 818–31.

- Gottman, John M. 1994. What Predicts Divorce? The Relationship between Marital Processes and Marital Outcomes. Hillsdale, NJ: Erlbaum.
- Hamilton, Brady E., Stephanie J. Ventura, Joyce A. Martin, and Paul D. Sutton. 2005. "Preliminary Births for 2004." Health E-Stats. Released October 28. U.S. Department of Health and Human Services, Center for Disease Control and Prevention, National Center for Health Statistics, Hyattsville, MD.
- Howes, Paul, and Howard J. Markman. 1989. "Marital Quality and Child Functioning: A Longitudinal Investigation." Child Development 60 (5): 1044–51.
- Karney, Benjamin R., and Thomas N. Bradbury. 1995. "The Longitudinal Course of Marital Quality and Stability: A Review of Theory, Method, and Research." *Psychological Bulletin* 118 (1): 3–34.
- Kim, Jae-on, and Charles W. Mueller. 1978. Factor Analysis: Statistical Methods and Practical Issues. Quantitative Applications in the Social Sciences, no. 14. Thousand Oaks, CA: Sage.
- King, Valarie. 2003. "The Influence of Religion on Fathers' Relationships with Their Children." *Journal of Marriage and Family* 65 (2): 382–95.
- Kitzmann, Katherine M. 2000. "Effects of Marital Conflict on Subsequent Triadic Family Interactions and Parenting." Developmental Psychology 36 (1): 3–13.
- Kochanska, Grazyna, Nazan Aksan, and Jennifer J. Carlson. 2005. "Temperament, Relationships, and Young Children's Receptive Cooperation with Their Parents." *Developmental Psychology* 41 (4): 648–60.
- Krishnakumar, Ambika, and Cheryl Buehler. 2000. "Interparental Conflict and Parenting Practices: A Meta-analysis." *Family Relations* 49 (1): 25–44.
- Lerner, Richard M. 1982. "Children and Adolescents as Producers of Their Own Development." *Developmental Review* 2 (4): 342–70.
- Lichter, Daniel T., Christie D. Batson, and J. Brian Brown. 2004. "Welfare Reform and Marriage Promotion: The Marital Expectations and Desires of Single and Cohabiting Mothers." Social Service Review 78 (1): 2–25.
- Lindahl, Kristin M., and Neena M. Malik. 1999. "Observations of Marital Conflict and Power: Relations with Parenting in the Triad." *Journal of Marriage and the Family* 61 (2): 320–30.
- Maccoby, Eleanor E., and John A. Martin. 1983. "Socialization in the Context of the Family: Parent-Child Interaction." 1–101 in Socialization, Personality, and Social Development, edited by E. Mavis Hetherington. Vol. 4 in Handbook of Child Psychology. New York: Wiley.
- Mathiesen, Kristin S., and Kristian Tambs. 1999. "The EAS Temperament Questionnaire—Factor Structure, Age Trends, Reliability, and Stability in a Norwegian Sample." *Journal of Child Psychology and Psychiatry* 40 (3): 431–39.
- McLoyd, Vonnie C. 1990. "The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting, and Socioemotional Development." *Child Development* 61 (2): 311–46.
- Nomaguchi, Kei M., and Melissa A. Milkie. 2003. "Costs and Rewards of Children: The Effects of Becoming a Parent on Adults' Lives." *Journal of Marriage and Family* 65 (2): 356–74.
- Orbuch, Terri L., Arland Thornton, and Jennifer Cancio. 2000. "The Impact of Marital Quality, Divorce, and Remarriage on the Relationships between Parents and Their Children." *Marriage and Family Review* 29 (4): 221–46.
- Osborne, Cynthia. 2005. "Marriage Following the Birth of a Child among Cohabiting and Visiting Parents." *Journal of Marriage and Family* 67 (1): 14–26.
- Reichman, Nancy E., Julien O. Teitler, Irwin Garfinkel, and Sara S. McLanahan. 2001. "Fragile Families: Sample and Design." *Children and Youth Services Review* 23 (4): 303–26.
- Shaffer, Juliet Popper. 1995. "Multiple Hypothesis Testing." Annual Review of Psychology 46: 561–84.
- Shapiro, Alyson Fearnley, John M. Gottman, and Sybil Carrère. 2000. "The Baby and the Marriage: Identifying Factors That Buffer against Decline in Marital Satisfaction after the First Baby Arrives." *Journal of Family Psychology* 14 (1): 59–70.
- Simons, Ronald L., Les B. Whitbeck, Rand D. Conger, and Janet N. Melby. 1990. "Husband and Wife Differences in Determinants of Parenting: A Social Learning and Exchange Model of Parental Behavior." *Journal of Marriage and the Family* 52 (2): 375–92.

- Stanley, Scott M. 2001. "Making a Case for Premarital Education." Family Relations 50 (3):
- Stanley, Scott M., Susan L. Blumberg, and Howard J. Markman. 1999. "Helping Couples Fight for Their Marriages: The PREP Approach." 279-303 in Preventive Approaches in Couples Therapy, edited by Rony Berger and Mo Therese Hannah. New York: Brunner/
- Stanley, Scott M., Howard J. Markman, Michelle St. Peters, and B. Douglas Leber. 1995. "Strengthening Marriages and Preventing Divorce: New Directions in Prevention Research." Family Relations 44 (4): 392-401.
- Tamis-LeMonda, Catherine S., Marc H. Bornstein, and Lisa Baumwell. 2001. "Maternal Responsiveness and Children's Achievement of Language Milestones." Child Development 72 (3): 748-67.
- Teachman, Jay D. 1991. "Contributions to Children by Divorced Fathers." Social Problems 38 (3): 358–70.
- Thompson, Ross A., and Deborah J. Laible. 1999. "Noncustodial Parents." 103-23 in Parenting and Child Development in "Nontraditional" Families, edited by Michael E. Lamb. Mahwah, NJ: Erlbaum.
- U.S. Department of Health and Human Services. 2006. "Welfare Reform Reauthorized: Healthy Marriage, Fatherhood Initiative Approved; Work Requirement Strengthened." News Release, February 8. U.S. Department of Health and Human Services, Administration for Children and Families, Washington, DC. http://www.dhhs.gov/news/press/ 2006pres/20060208.html.
- Waller, Maureen R., and Sara S. McLanahan. 2005. "'His' and 'Her' Marriage Expectations: Determinants and Consequences." Journal of Marriage and Family 67 (2): 53-67.
- White, Lynn. 1999. "Contagion in Family Affection: Mothers, Fathers, and Young Adult Children." Journal of Marriage and the Family 61 (2): 284-94.
- Wilcox, W. Bradford. 1998. "Conservative Protestant Childrearing: Authoritarian or Authoritative?" American Sociological Review 63 (6): 796-809.
- Zellner, Arnold. 1962. "An Efficient Method of Estimating Seemingly Unrelated Regressions and Tests of Aggregation Bias." Journal of the American Statistical Association 57 (298): 348-68.

## Notes

An earlier version of this article was presented at the annual meetings of the American Psychological Association, Chicago, August 2002, and the American Sociological Association, Chicago, August 2002. This research is supported by a grant to Marcia Carlson from the Demographic and Behavioral Sciences Branch of the National Institute of Child Health and Human Development (K01HD042776). The Fragile Families and Child Wellbeing Study is funded by a grant from the National Institute of Child Health and Human Development (R01HD36916) and a consortium of private foundations. The authors thank several anonymous reviewers, Jeanne Brooks-Gunn, Scott Coltrane, Ariel Kalil, Steven Nock, Robert Plotnick, Scott Stanley, and seminar participants at Columbia University, Johns Hopkins University, Princeton University, the University of Chicago, and the University of Michigan for very helpful comments.

- 1. Attrition analyses by marital status indicate the characteristics of cases (N = 613)dropped from the sample because the father or mother was not interviewed at the 1-year survey. Compared to the included sample, parents excluded from the sample are more likely to be nonwhite, poor, unemployed (except married fathers), have lower education, have a substance problem, and have children with more difficult temperaments (measure described subsequently). Also, except for married fathers, the reported baseline parental relationship quality is lower for the excluded cases than for those that remain in the sample. Some of these cases dropped due to attrition would have been excluded from the sample anyway, because the couple broke up between the birth and the 1-year followup; hence, the comparison of excluded cases with those in the sample represents an upper bound of the differences between the two groups.
  - 2. At the beginning of data collection, an alternate set of responses for these questions

was used (for about 20 percent of the total sample): five categorical response choices, ranging from 1 (never) to 5 (every day). When repeating these response choices multiple times for each item proved too cumbersome, the survey was changed to ask parents to report the actual number of days in the week prior to the survey when they engaged in each activity; responses range from 0 to 7 days. For this article, the categorical responses to numbers of days are assigned as follows: never = 0; once or twice per month = 1; several times per month = 2; several times per week = 4; every day = 7.

- 3. The current measure is similar to that in the Home Observation Measurement of the Environment; Bettye Caldwell and Robert Bradley (1984) developed the measure, and it is included in the National Longitudinal Survey of Youth, Child Supplement.
- 4. The low reliabilities on the relationship quality measures suggest that the items are not measuring uniform concepts of supportiveness and conflict, respectively. At the same time, one factor clearly emerges out of each set of relevant items, and the factor loadings of each item are above 0.3, the cut point to be considered substantial (Kim and Mueller 1978).
- 5. We also estimated models using mothers' and fathers' individual reports of relationship quality. Not surprisingly, we find that each parent's report of relationship quality is strongly related to his or her own reported parenting: all but one of the 12 coefficients (three relationship quality measures by two parenting outcomes for both mothers and fathers) is statistically significant (one is marginally statistically significant). There is far less effect of parents' reports of relationship quality on the other parent's parenting behavior. The only coefficients that are statistically significant (at p < .05) are as follows: fathers' report of conflict is associated with greater maternal engagement, and fathers' report of supportiveness is linked to more frequent maternal spanking.
- 6. To test the robustness of these findings, logistic regression models were estimated using dichotomous measures of spanking. The pattern of results is very similar to those of the linear regression models.
- 7. This counterintuitive finding may be attributable to the host of independent variables that are correlated with poverty status; in bivariate models, nonpoor fathers are much more engaged than their poor counterparts (with no difference observed between near-poor and poor fathers).